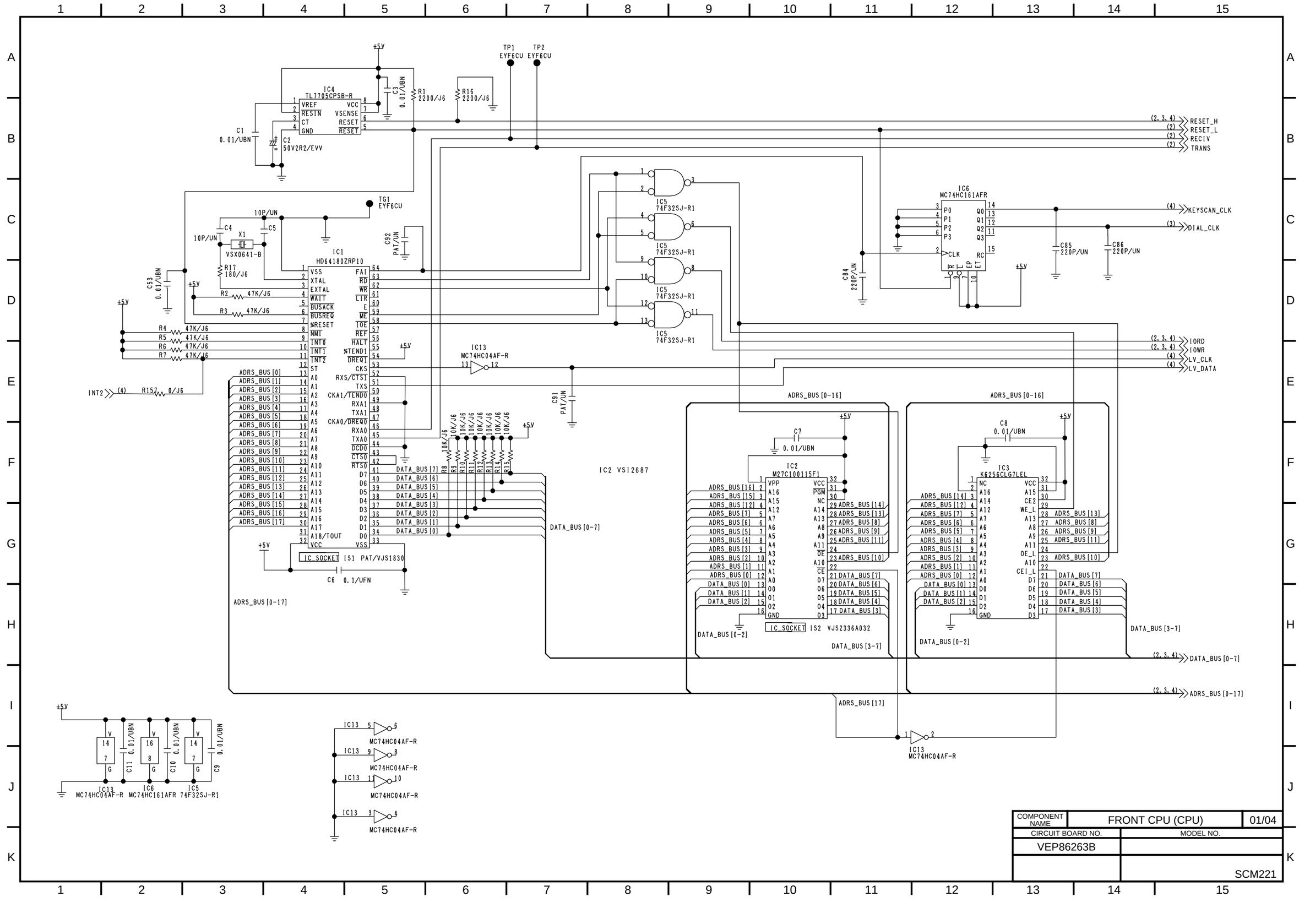
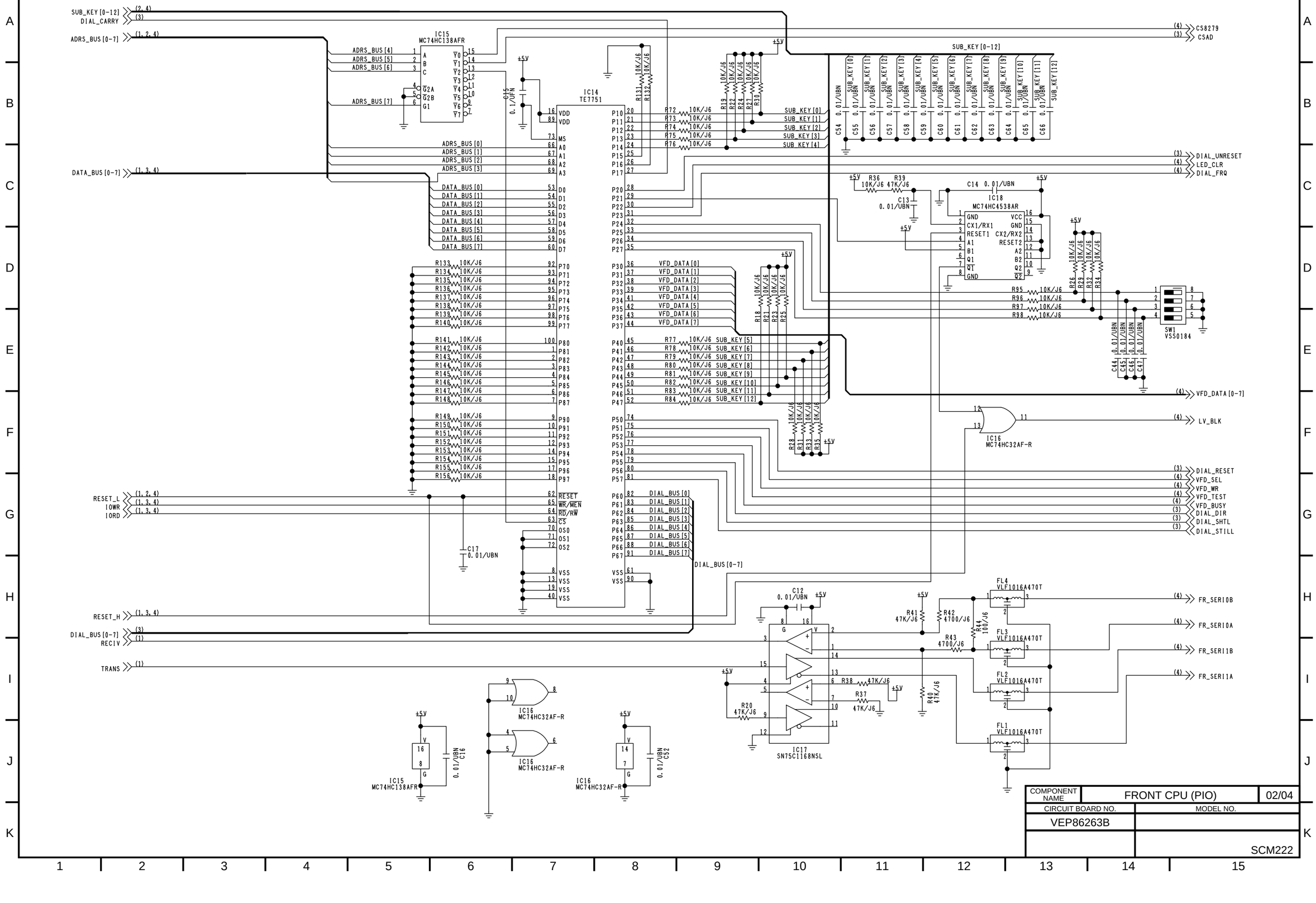
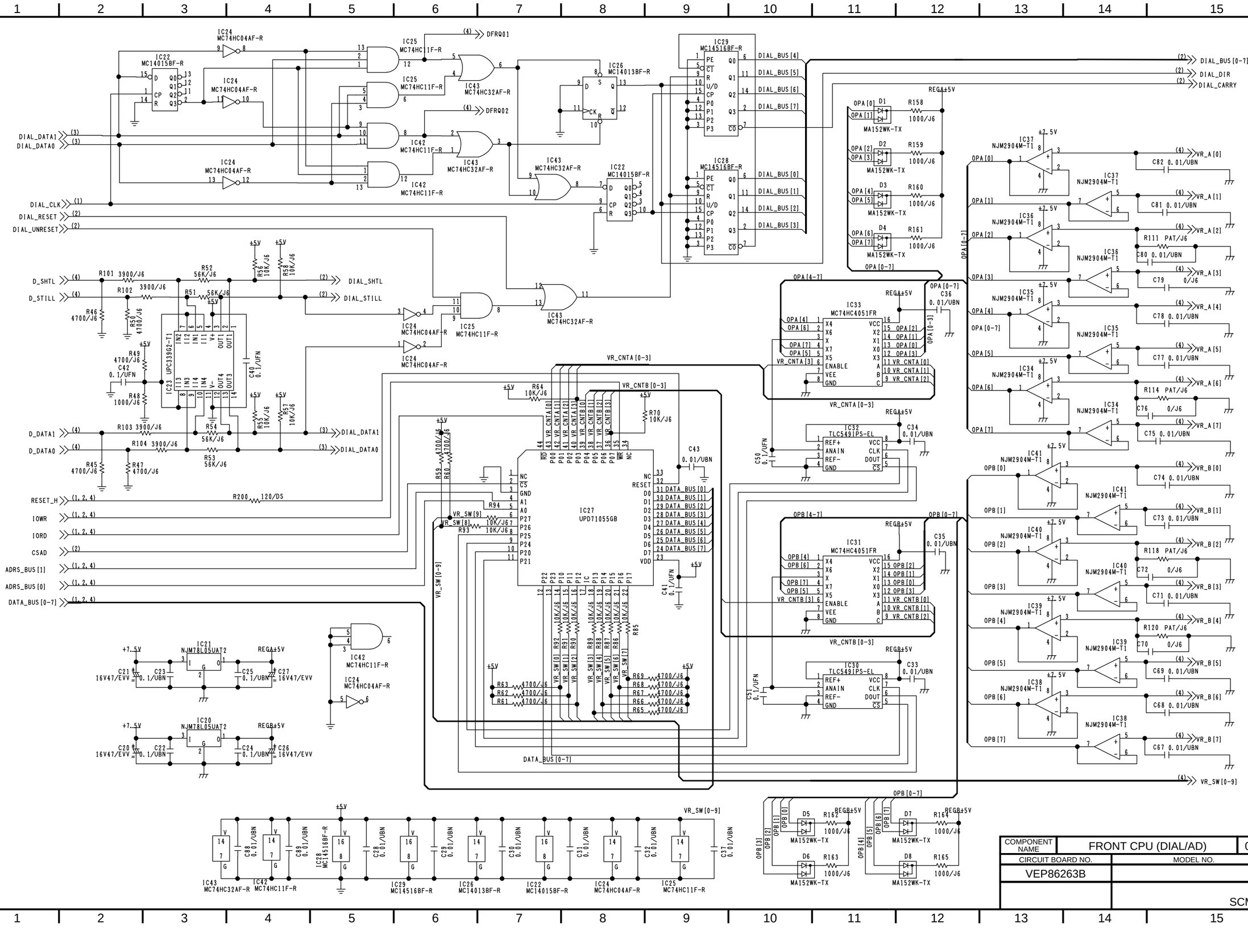
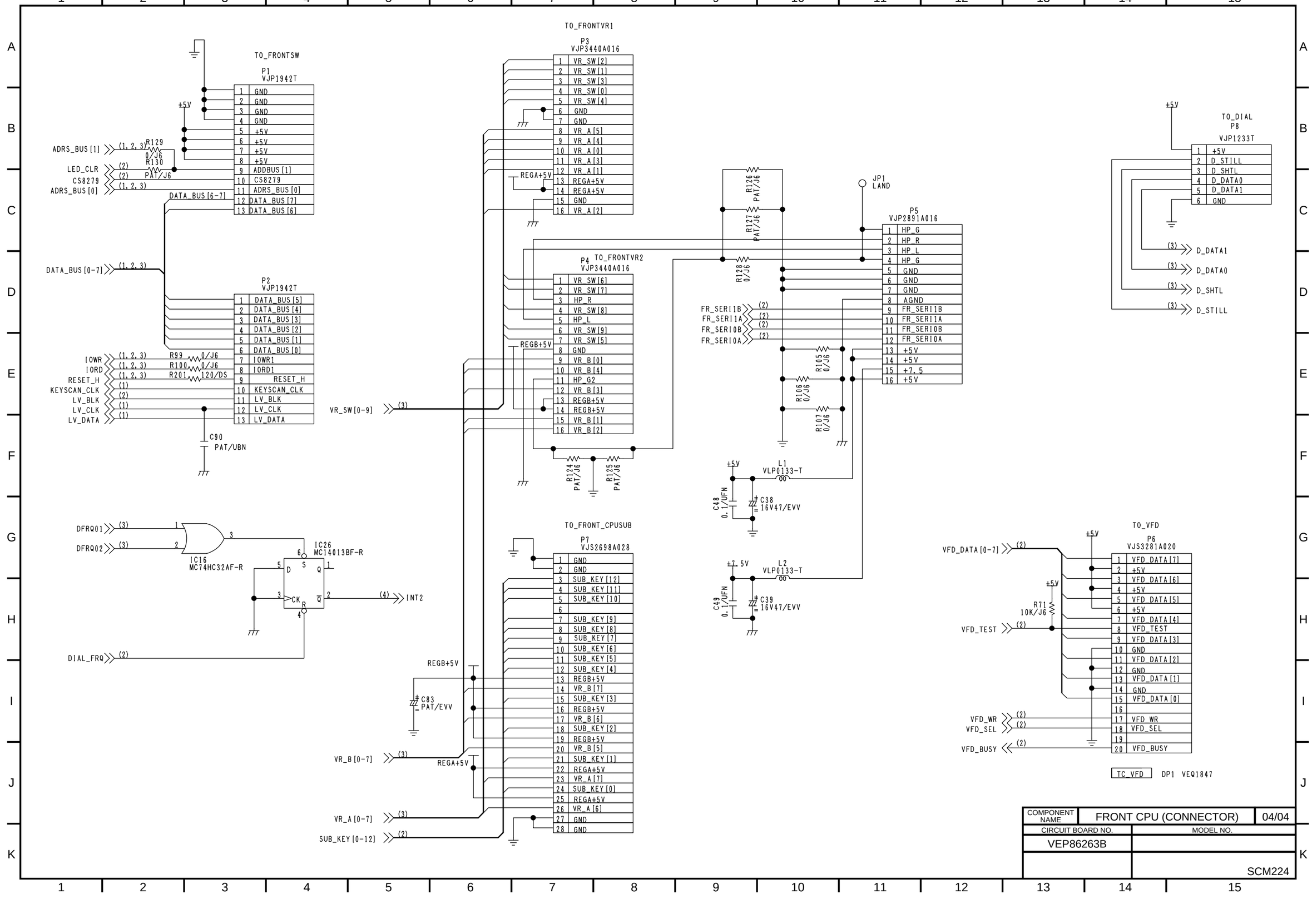

IC4
TL7705CPSB-R
VREF
RESIN
CT
GND
VCC
VSENSE
RESET
RESET
C1
0.01/UBN
C2
50V2R2/EVV
C3
0.01/UBN
R1
2200/J6
R16
2200/J6
TP1
EYF6CU
TP2
EYF6CU
+5V
TG1
EYF6CU
10P/UN
C4
10P/UN
C5
X1
VSX0641-B
C92
PAT/UN
IC1
HD64180ZRP10
C53
0.01/UBN
R17
180/J6
R2
47K/J6
R3
47K/J6
R4
47K/J6
R5
47K/J6
R6
47K/J6
R7
47K/J6
INT2
(4)
R157
0/J6
ADRS_BUS[0]
ADRS_BUS[1]
ADRS_BUS[2]
ADRS_BUS[3]
ADRS_BUS[4]
ADRS_BUS[5]
ADRS_BUS[6]
ADRS_BUS[7]
ADRS_BUS[8]
ADRS_BUS[9]
ADRS_BUS[10]
ADRS_BUS[11]
ADRS_BUS[12]
ADRS_BUS[13]
ADRS_BUS[14]
ADRS_BUS[15]
ADRS_BUS[16]
ADRS_BUS[17]
DATA_BUS[7]
DATA_BUS[6]
DATA_BUS[5]
DATA_BUS[4]
DATA_BUS[3]
DATA_BUS[2]
DATA_BUS[1]
DATA_BUS[0]
IC_SOCKET IS1 PAT/VJS1830
C6 0.1/UFN
IC13
MC74HC04AF-R
C91
PAT/UN
IC5
74F32SJ-R1
IC2 VSI2687
DATA_BUS[0-7]
ADRS_BUS[0-17]
IC6
MC74HC161AFR
C84
220P/UN
C85
220P/UN
C86
220P/UN
(2,3,4) RESET_H
(2) RESET_L
(2) RECIV
(2) TRANS
(4) KEYSCAN_CLK
(3) DIAL_CLK
(2,3,4) IORD
(2,3,4) IOWR
(4) LV_CLK
(4) LV_DATA
ADRS_BUS[0-16]
C7
0.01/UBN
IC2
M27C100115F1
IC_SOCKET IS2 VJS2336A032
DATA_BUS[0-2]
DATA_BUS[3-7]
C8
0.01/UBN
IC3
K6256CLG7LEL
(2,3,4) DATA_BUS[0-7]
(2,3,4) ADRS_BUS[0-17]
C11 0.01/UBN
C10 0.01/UBN
C9 0.01/UBN
IC13 MC74HC04AF-R IC6 MC74HC161AFR IC5 74F32SJ-R1
COMPONENT NAME
FRONT CPU (CPU)
01/04
CIRCUIT BOARD NO.
MODEL NO.
VEP86263B
SCM221


SUB_KEY [0-12]
DIAL_CARRY
ADRS_BUS [0-7]
DATA_BUS [0-7]
RESET_L
IOWR
IORD
RESET_H
DIAL_BUS [0-7]
RECIV
TRANS
IC15
MC74HC138AFR
IC14
TE7751
IC18
MC74HC4538AR
IC16
MC74HC32AF-R
IC17
SN75C1168NSL
SW1
VSS0184
CS8279
CSAD
DIAL_UNRESET
LED_CLR
DIAL_FRQ
VFD_DATA [0-7]
LV_BLK
DIAL_RESET
VFD_SEL
VFD_WR
VFD_TEST
VFD_BUSY
DIAL_DIR
DIAL_SHTL
DIAL_STILL
FR_SERI0B
FR_SERI0A
FR_SERI1B
FR_SERI1A
COMPONENT NAME
FRONT CPU (PIO)
02/04
CIRCUIT BOARD NO.
VEP86263B
MODEL NO.
SCM222


IC24 MC74HC04AF-R
IC22 MC14015BF-R
IC25 MC74HC11F-R
IC43 MC74HC32AF-R
IC42 MC74HC11F-R
IC26 MC14013BF-R
IC29 MC14516BF-R
IC28 MC14516BF-R
DIAL_DATA1
DIAL_DATA0
DIAL_CLK
DIAL_RESET
DIAL_UNRESET
DFRQ01
DFRQ02
DIAL_BUS[4]
DIAL_BUS[5]
DIAL_BUS[6]
DIAL_BUS[7]
DIAL_BUS[0]
DIAL_BUS[1]
DIAL_BUS[2]
DIAL_BUS[3]
DIAL_BUS[0-7]
DIAL_DIR
DIAL_CARRY
REGA±5V
OPA[0] D1 R158 1000/J6 MA152WK-TX
OPA[1]
OPA[2] D2 R159 1000/J6 MA152WK-TX
OPA[3]
OPA[4] D3 R160 1000/J6 MA152WK-TX
OPA[5]
OPA[6] D4 R161 1000/J6 MA152WK-TX
OPA[7]
OPA[0-7]
D_SHTL
D_STILL
R101 3900/J6
R102 3900/J6
R52 56K/J6
R51 56K/J6
R56 10K/J6
R58 10K/J6
DIAL_SHTL
DIAL_STILL
R46 4700/J6
R50 4700/J6
IC23 UPC339G2-T1
R49 4700/J6
C42 0.1/UFN
R48 1000/J6
C40 0.1/UFN
R55 10K/J6
R57 10K/J6
R103 3900/J6
R104 3900/J6
R54 56K/J6
R53 56K/J6
D_DATA1
D_DATA0
DIAL_DATA1
DIAL_DATA0
R45 4700/J6
R47 4700/J6
RESET_H
IOWR
IORD
CSAD
ADRS_BUS[1]
ADRS_BUS[0]
DATA_BUS[0-7]
R200 120/DS
IC33 MC74HC4051FR
IC32 TLC5491PS-EL
IC31 MC74HC4051FR
IC30 TLC5491PS-EL
C36 0.01/UBN
C34 0.01/UBN
C35 0.01/UBN
C33 0.01/UBN
C50 0.1/UFN
C51 0.1/UFN
VR_CNTA[0-3]
VR_CNTB[0-3]
OPA[4-7]
OPA[0-3]
OPB[4-7]
OPB[0-3]
OPB[0-7]
IC27 UPD71055GB
R64 10K/J6
R70 10K/J6
C43 0.01/UBN
C41 0.1/UFN
R59 4700/J6
R60 4700/J6
R94 10K/J6
R93 10K/J6
R92 10K/J6
R91 10K/J6
R90 10K/J6
R89 10K/J6
R88 10K/J6
R87 10K/J6
R86 10K/J6
R85 10K/J6
R63 4700/J6
R62 4700/J6
R61 4700/J6
R69 4700/J6
R68 4700/J6
R67 4700/J6
R66 4700/J6
R65 4700/J6
VR_SW[0-9]
VR_SW[8]
VR_SW[9]
DATA_BUS[0-7]
IC21 NJM78L05UAT2
IC20 NJM78L05UAT2
C21 16V47/EVV
C23 0.1/UBN
C25 0.1/UBN
C27 16V47/EVV
C20 16V47/EVV
C22 0.1/UBN
C24 0.1/UBN
C26 16V47/EVV
IC42 MC74HC11F-R
IC24 MC74HC04AF-R
IC37 NJM2904M-T1
IC36 NJM2904M-T1
IC35 NJM2904M-T1
IC34 NJM2904M-T1
IC41 NJM2904M-T1
IC40 NJM2904M-T1
IC39 NJM2904M-T1
IC38 NJM2904M-T1
OPB[0]
OPB[1]
OPB[2]
OPB[3]
OPB[4]
OPB[5]
OPB[6]
OPB[7]
C82 0.01/UBN
C81 0.01/UBN
R111 PAT/J6
C80 0.01/UBN
C79 0/J6
C78 0.01/UBN
C77 0.01/UBN
R114 PAT/J6
C76 0/J6
C75 0.01/UBN
C74 0.01/UBN
C73 0.01/UBN
R118 PAT/J6
C72 0/J6
C71 0.01/UBN
R120 PAT/J6
C70 0/J6
C69 0.01/UBN
C68 0.01/UBN
C67 0.01/UBN
VR_A[0]
VR_A[1]
VR_A[2]
VR_A[3]
VR_A[4]
VR_A[5]
VR_A[6]
VR_A[7]
VR_B[0]
VR_B[1]
VR_B[2]
VR_B[3]
VR_B[4]
VR_B[5]
VR_B[6]
VR_B[7]
VR_SW[0-9]
C88 0.01/UBN
C89 0.01/UBN
C28 0.01/UBN
C29 0.01/UBN
C30 0.01/UBN
C31 0.01/UBN
C32 0.01/UBN
C37 0.01/UBN
IC43 MC74HC32AF-R
IC42 MC74HC11F-R
IC29 MC14516BF-R
IC26 MC14013BF-R
IC22 MC14015BF-R
IC24 MC74HC04AF-R
IC25 MC74HC11F-R
D5 R162 1000/J6 MA152WK-TX
D6 R163 1000/J6 MA152WK-TX
D7 R164 1000/J6 MA152WK-TX
D8 R165 1000/J6 MA152WK-TX
COMPONENT NAME
FRONT CPU (DIAL/AD)
03/04
CIRCUIT BOARD NO.
VEP86263B
MODEL NO.
SCM223


TO_FRONTSW
P1
VJP1942T
1 GND
2 GND
3 GND
4 GND
5 +5V
6 +5V
7 +5V
8 +5V
9 ADDBUS[1]
10 CS8279
11 ADRS_BUS[0]
12 DATA_BUS[7]
13 DATA_BUS[6]
+5V
ADRS_BUS[1]
R129 0/J6
R130 PAT/J6
LED_CLR
CS8279
ADRS_BUS[0]
DATA_BUS[6-7]
DATA_BUS[0-7]
P2
VJP1942T
1 DATA_BUS[5]
2 DATA_BUS[4]
3 DATA_BUS[3]
4 DATA_BUS[2]
5 DATA_BUS[1]
6 DATA_BUS[0]
7 IOWR1
8 IORD1
9 RESET_H
10 KEYSCAN_CLK
11 LV_BLK
12 LV_CLK
13 LV_DATA
IOWR
IORD
RESET_H
KEYSCAN_CLK
LV_BLK
LV_CLK
LV_DATA
R99 0/J6
R100 0/J6
R201 120/DS
C90 PAT/UBN
TO_FRONTVR1
P3
VJP3440A016
1 VR_SW[2]
2 VR_SW[1]
3 VR_SW[3]
4 VR_SW[0]
5 VR_SW[4]
6 GND
7 GND
8 VR_A[5]
9 VR_A[4]
10 VR_A[0]
11 VR_A[3]
12 VR_A[1]
13 REGA+5V
14 REGA+5V
15 GND
16 VR_A[2]
REGA+5V
TO_FRONTVR2
P4
VJP3440A016
1 VR_SW[6]
2 VR_SW[7]
3 HP_R
4 VR_SW[8]
5 HP_L
6 VR_SW[9]
7 VR_SW[5]
8 GND
9 VR_B[0]
10 VR_B[4]
11 HP_G2
12 VR_B[3]
13 REGB+5V
14 REGB+5V
15 VR_B[1]
16 VR_B[2]
REGB+5V
VR_SW[0-9]
R124 PAT/J6
R125 PAT/J6
R126 PAT/J6
R127 PAT/J6
R128 0/J6
JP1
LAND
P5
VJP2891A016
1 HP_G
2 HP_R
3 HP_L
4 HP_G
5 GND
6 GND
7 GND
8 AGND
9 FR_SERI1B
10 FR_SERI1A
11 FR_SERI0B
12 FR_SERI0A
13 +5V
14 +5V
15 +7.5
16 +5V
FR_SERI1B
FR_SERI1A
FR_SERI0B
FR_SERI0A
R105 0/J6
R106 0/J6
R107 0/J6
L1
VLP0133-T
C48 0.1/UFN
C38 16V47/EVV
L2
VLP0133-T
C49 0.1/UFN
C39 16V47/EVV
+7.5V
TO_DIAL
P8
VJP1233T
1 +5V
2 D_STILL
3 D_SHTL
4 D_DATA0
5 D_DATA1
6 GND
D_DATA1
D_DATA0
D_SHTL
D_STILL
DFRQ01
DFRQ02
IC16
MC74HC32AF-R
IC26
MC14013BF-R
INT2
DIAL_FRQ
TO_FRONT_CPUSUB
P7
VJS2698A028
1 GND
2 GND
3 SUB_KEY[12]
4 SUB_KEY[11]
5 SUB_KEY[10]
6
7 SUB_KEY[9]
8 SUB_KEY[8]
9 SUB_KEY[7]
10 SUB_KEY[6]
11 SUB_KEY[5]
12 SUB_KEY[4]
13 REGB+5V
14 VR_B[7]
15 SUB_KEY[3]
16 REGB+5V
17 VR_B[6]
18 SUB_KEY[2]
19 REGB+5V
20 VR_B[5]
21 SUB_KEY[1]
22 REGA+5V
23 VR_A[7]
24 SUB_KEY[0]
25 REGA+5V
26 VR_A[6]
27 GND
28 GND
C83 PAT/EVV
VR_B[0-7]
REGA+5V
VR_A[0-7]
SUB_KEY[0-12]
TO_VFD
P6
VJS3281A020
1 VFD_DATA[7]
2 +5V
3 VFD_DATA[6]
4 +5V
5 VFD_DATA[5]
6 +5V
7 VFD_DATA[4]
8 VFD_TEST
9 VFD_DATA[3]
10 GND
11 VFD_DATA[2]
12 GND
13 VFD_DATA[1]
14 GND
15 VFD_DATA[0]
16
17 VFD_WR
18 VFD_SEL
19
20 VFD_BUSY
VFD_DATA[0-7]
R71 10K/J6
VFD_TEST
VFD_WR
VFD_SEL
VFD_BUSY
TC_VFD
DP1 VEQ1847
COMPONENT NAME
FRONT CPU (CONNECTOR)
04/04
CIRCUIT BOARD NO.
VEP86263B
MODEL NO.
SCM224